

WHAT IS CLAIMED IS:

1. An implantable device implantable in an artery of a patient at a bifurcation thereof into a first branch supplying blood to a vital region having a high sensitivity to emboli in the blood, and a second branch supplying blood to a less vital region having a lower sensitivity to emboli in the blood;

said implantable device being of tubular configuration initially of a small diameter for facilitating its introduction into and deployment through the artery to said bifurcation, and expandable to a larger diameter for implantation in the artery at said bifurcation;

said implantable device comprising: a base element configured and dimensioned for anchoring said implantation device in the artery at said bifurcation; and a deflector element configured and dimensioned for covering the inlet of said first branch at the bifurcation when the implantable device is implanted in said artery;

said deflector element being formed with openings therethrough of a size and configuration to deflect emboli in the blood to said second branch without blocking blood flow through said second branch or through said first branch;

said base element being a coil of tubular configuration having overlapping ends in said initial diameter enabling it to be expanded from said initial diameter to said larger diameter.

2. The implantable device according to Claim 1, wherein said coil is a perforated sheet coiled into said tubular configuration.

3. The implantable device according to Claim 2, wherein said perforated sheet is dimensioned also to have overlapping ends when expanded to said larger diameter.

4. The implantable device according to Claim 2, wherein said perforated sheet is dimensioned to define a gap between its ends when expanded to said larger diameter.

5. The implantable device according to Claim 2, wherein said deflector element is integrally formed with said perforated sheet.

6. The implantable device according to Claim 2, wherein said perforated sheet of the base element is formed with larger size openings than those of said deflector element.

7. The implantable device according to Claim 2, wherein said perforated sheet of the base element is formed with a relatively stiff frame around its periphery.

8. The implantable device according to Claim 2, wherein said perforated sheet of the base element is dimensioned such that, when initially coiled into said tubular configuration, it has an initial small diameter of 1 – 4 mm.

9. The implantable device according to Claim 8, wherein said perforated sheet of the base element is dimensioned such that its expanded larger diameter is 5 – 30 mm.

10. The implantable device according to Claim 2, wherein said perforated sheet of the base element and said deflector element are both of a braided material.

11. The implantable device according to Claim 2, wherein said perforated sheet of the base element is constructed of wires having a diameter of 100 – 1500 μm .

12. The implantable device according to Claim 2, wherein said perforated sheet of the base element is constructed of wires having a diameter of 100 – 200 μm .

13. The implantable device according to Claim 2, wherein said deflector element is constructed of wires having a diameter of 20 – 75 μm .

14. The implantable device according to Claim 2, wherein said perforated sheet of the base element includes at least one radiographic opaque marker.

15. The implantable device according to Claim 1, wherein the implantable device is configured and dimensioned for implantation in a patient's CCA at its bifurcation into the ICA constituting said first branch, and the ECA constituting said second branch.

16. An implantable device for implantation in a patient's CCA at its bifurcation into the ICA and the ECA, said implantable device being of tubular configuration initially of small diameter and expandable to a large diameter when implanted;

said implantable device comprising: a base element configured and dimensioned for anchoring the implantable device in said CCA, and a deflector element configured and dimensioned for covering the inlet of said ICA;

said deflector element being formed with openings therethrough of a size and configuration to deflect emboli in the blood to said ECA without blocking blood flow through said ECA or through said ICA;

said base element including a coil of tubular configuration having overlapping ends in said initial diameter enabling it to be expanded from said initial diameter to said larger diameter.

17. The implantable device according to Claim 16, wherein said coil is a perforated sheet coiled into said tubular configuration and having overlapping ends enabling it to be expanded to said larger diameter.

18. The implantable device according to Claim 17, wherein said deflector element is integrally formed with said perforated sheet.

19. The implantable device according to Claim 17, wherein said perforated sheet is dimensioned also to have overlapping ends when expanded to said larger diameter.

20. The implantable device according to Claim 17, wherein said perforated sheet is dimensioned to define a gap between its ends when expanded to said larger diameter.